<center>**REMARKS**</center>

Overview

   Claims 1-17 are currently pending in the present application. Claims 1, 9, 11-12, 14 and 17 have been amended. The present response is an earnest effort to place all claims in the proper form for immediate allowance. Reconsideration and passage to issuance is therefore respectfully requested.

Issues Under 35 U.S.C. § 103

   Claims 1-5, 7-10, 12-13 and 15-17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,901,300 to Blevins in view of U.S. Patent No. 4,823,299 to Chang. Claims 6, 11 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Blevins in view of Chang and in further view of U.S. Patent No. 4,349,869 to Prett. These rejections are respectfully traversed.

   Applicants wish to thank Examiner for the clarification regarding the Examiner's understanding of the Blevins reference. In response, Applicants have clarified that the actual variable signal is the measured variable signal and thus does not include calculated data. As Applicants previously noted, Blevins does not arrange measured variable signals. Instead, Blevins arranges approximated data. Specifically, Blevins teaches of arranging coefficients that represent input/output curves (response curves). As such, Blevins teaches the finding of the execution rate as a function of one or more process variables that then effect process delay. Blevins does not look at the specific values of the measured variable signals to determine lag. Moreover, Applicants have amended claim 1 to clarify that the determination of goodness of fit of any function involves measuring any one of the goodness of fit characteristics, such as the

<center>8</center>

means squared error, the Kolmogorov Smirnov statistic, the Pearson's correlation coefficient, etc. Blevins does not disclose this limitation either. As neither Chang nor Prett disclose the use of measured variable signals to determine a lag, Applicants respectfully request that the Examiner withdraw the rejections of the claims based on these references.

Applicants have also amended claim 12 to further clarify the shifting of matrixes issue. As previously noted, Chang discloses a triangulation and annulling of 4x4 matrixes. The word "shift" that is present in the disclosure relates to shifting new data into the array, row by row. This is completely different from the present invention. The present invention claims the following: Given a string of values of K process values arranged into K columns, a snapshot of N time scans is taken, resulting in an N by K matrix. Then, each column of that matrix is shifted by predetermined values and as a result a plurality of shifted matrixes is produced. Neither Blevins nor Chang teach or fairly suggest this limitation and therefore Applicants respectfully request that these rejections be withdrawn.

All of the remaining claims depend from what Applicants respectfully submit are allowable base claims and therefore all claims are believed to be in allowable form.
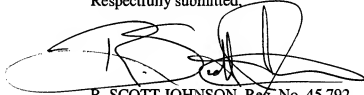

Conclusion

It is respectfully submitted that all rejections have been overcome and that all claims are in proper form for immediate allowance. Reconsideration is respectfully requested. If prosecution of the present application can be facilitated by a telephone interview, Applicants invite the Examiner to telephone Applicants' attorney at the below-identified number.

Please consider this a Request for a Three-Month Extension of Time from August 1, 2007 to November 1, 2007 and charge Deposit Account No. 26-0084 the amount of $525.00 for this extension.

No other fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

R. SCOTT JOHNSON, Reg. No. 45,792
McKEE, VOORHEES & SEASE, P.L.C.
801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No: (515) 288-3667
Fax No: (515) 288-1338
CUSTOMER NO: 22885

Attorneys of Record

- bjh -